

WHAT IS CLAIMED IS:

1. An information processing apparatus comprising:
  - encryption means, for encrypting a life counter for content data;
  - addition means, for adding said encrypted life counter to a content data file; and
  - transmission means, for externally transmitting, via a network, said content data file having said added life counter.

2. An information processing apparatus according to claim 1, wherein said transmission means externally transmits said content data file via the Internet.

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reduced to a value smaller than said specific value.

4. An information processing apparatus according to claim 3, wherein said reception means externally receives said content data file via the Internet.

5. An information processing apparatus according to claim 4, wherein said processing means displays, prints or reproduces data in said content data file.

10 6. An information processing system whereby a first information processing apparatus and a second information processing apparatus are interconnected, wherein said first information apparatus comprises:

15        encryption means, for encrypting a life counter for content data,

addition means, for adding said encrypted life counter to a content data file, and

20        transmission means, for transmitting, via a network, said content data file having said added life counter to said second information apparatus; and

25        wherein said second information processing apparatus comprises:

reception means, for receiving, via a network, from said first information processing apparatus a content data file to which an encrypted life counter has been added,

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processing means, for processing said content data file,

subtraction means, for subtracting a specific value from said encrypted life counter, and

5 control means, for inhibiting said processing means from processing said content data file when the value held by said encrypted life counter has been reduced to a number smaller than said specific value.

10 7. An information processing system according to claim 6, wherein said transmission means or said reception means externally transmits or receives said content data file via the Internet.

15 8. An information processing system according to claim 7, wherein said processing means displays, prints or reproduces data in said content data file.

9. An information processing system according to 20 claim 8, wherein said second information processing apparatus further comprises:

copying means, for copying said content data file including said encrypted life counter; and

25 counter control means, for reducing, to half a value, the value held by life counters of a source file that is copied and a destination file when copying said content data file.

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10. An information processing system according to  
claim 8, wherein said second information processing  
apparatus further comprises:

5 moving means, for moving said content data file  
without changing the value held by said encrypted life  
counter.

10. An information processing system according to  
claim 8, wherein said first information processing  
apparatus further comprises:

15 determination means, for determining the value to  
be held by said life counter in correlation with the  
frequency of the display, printing or reproduction of  
said content data.

12. An information processing system according to  
claim 8, wherein said first information processing  
apparatus further comprises:

20 determination means, for determining the value to  
be held by said life counter in correlation with a  
content data reproduction time, and wherein said  
subtraction means of said second information processing  
apparatus decrements the value held by said encrypted  
life counter by a value correlated with a period of  
25 time during which said content data is reproduced.

13. An information processing apparatus

comprising:

data transmission means, for externally transmitting, via a network, a content data file;

5 life counter transmission means, for externally transmitting, via said network, a life counter for said content data file; and

program transmission means, for externally transmitting, via said network, an application program file for processing said content data file.

10 14. An information processing apparatus according to claim 13, wherein said data transmission means, said life counter transmission means and said program transmission means externally transmit said content data file via the Internet.

15 15. An information processing apparatus according to claim 14, wherein said application program file is used to display, print or reproduce data in said content data file.

20 16. An information processing apparatus comprising:

data reception means, for receiving, via a network, a content data file;

25 life counter reception means, for receiving, via said network, a life counter for said content data

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file;

program reception means, for receiving, via said network, an application program file for processing said content data file;

5        encryption means, for encrypting said life counter;

addition means, for adding said encrypted life counter to said content data file;

10      transmission means, for transmitting, via said network, said application program file to a different information processing apparatus; and

15      control means, for permitting the reading only of the content data file for an application program that is currently being executed by said different information processing apparatus.

17. An information processing apparatus according to claim 16, wherein said data reception means, said life counter reception means and said program reception means externally receive said content data file via the Internet.

20      18. An information processing apparatus according to claim 17, wherein said application program file is used to display, print or reproduce data in said content data file.

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19. An information processing apparatus comprising:  
reception means, for receiving, via a network, an application program file for processing content data from a different information processing apparatus;  
5 processing means, for executing, via said network, said application program for processing content data stored in said different information processing apparatus;  
10 subtraction means, for subtracting, via said network, a specific value from a life counter for said content data stored in said different information processing apparatus each time said content data file is processed; and  
15 control means, for inhibiting said processing means from processing content data when the value held by said encrypted life counter has been reduced to a value smaller than said specific value.

20. An information processing apparatus according to claim 19, wherein, via said network, said processing means displays, prints or reproduces data in said content data file.

25. An information processing system whereby a first information processing apparatus, a second information processing apparatus and a third

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information processing apparatus are interconnected,  
wherein said first information processing apparatus  
comprises:

5 data transmission means, for transmitting, via a  
network, a content data file to said second information  
processing apparatus,

10 life counter transmission means, for transmitting,  
via said network, a life counter for said content data  
file to said second information processing apparatus,  
and

15 program transmission means, for transmitting, via  
said network, an application program file for  
processing said content data file to said second  
information processing apparatus;

wherein said second information processing  
apparatus comprises:

data reception means, for receiving, via said  
network, said content data file from said first  
information apparatus,

20 life counter reception means, for receiving, via said  
network, a life counter for said content data file  
from said first information processing apparatus,

25 program reception means, for receiving, via said  
network, an application program file for processing  
said content data file from said first information  
processing apparatus,

encryption means, for encrypting said life

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counter,

addition means, for adding said encrypted life counter to said content data file,

transmission means, for transmitting, via said network, said application program file to said third information processing apparatus, and

control means for permitting the reading of the content data file only for an application program that is currently being executed by said third information processing apparatus; and

wherein said third information processing apparatus comprises:

reception means, for receiving, via said network, an application program file for processing content data received from said second information processing apparatus,

processing means, for executing, via said network, said application program for processing content data stored in said second information processing apparatus;

subtraction means, for subtracting, via said network, a specific value from a life counter for said content data stored in said different information processing apparatus each time said content data file is processed, and

control means, for inhibiting said processing means from processing content data when the value held by said encrypted life counter has been reduced a value

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smaller than said specific value.

22. An information processing system according to  
claim 21, wherein said data transmission means, said  
5 life counter transmission means and said program  
transmission means, or said data reception means, said  
life counter reception means and said program reception  
means externally transmit or receive said content data  
file via the Internet.

10 23. An information processing system according to  
claim 22, wherein said processing means displays,  
prints or reproduces data in said content data file.

15 24. An information processing system according to  
claim 23, wherein said processing means inhibits the  
copying of said content data having said encrypted life  
counter stored in said second information processing  
apparatus, even if said application program is  
20 executed.

25 25. An information processing system according to  
claim 23, wherein said processing means inhibits the  
moving of said content data having said encrypted life  
counter stored in said second information processing  
apparatus, even if said application program is  
executed.

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26. An information processing system according to  
claim 23, wherein said first information processing  
apparatus further comprises:

5 determination means, for determining the value to  
be held by said life counter in correlation with the  
frequency of the display, printing or reproduction of  
said content data.

10 27. An information processing system according to  
claim 23, wherein said first information processing  
apparatus further comprises:

15 determination means, for determining the value to  
be held by said life counter in correlation with a  
content data reproduction time, and wherein said  
subtraction means decrements the value held by said  
encrypted life counter by a value correlated with a  
period of time during which said content data is  
reproduced.

20 28. An information processing system according to  
claim 23, wherein said second information processing  
apparatus further comprises:

printing means, for printing content data on a  
sheet.

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29. An information processing system according to  
claim 23, wherein said data reception means of said

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second information processing apparatus receives a content data file via the Internet, encrypts said content data file, and stores the encrypted content data file; and wherein said processing means of said 5 third information processing apparatus decrypts said encrypted content data file, and displays, prints or reproduces the decrypted content data file.

10 30. An information processing system according to claim 23, wherein said second information processing apparatus is a peripheral device having an Internet connection function.

15 31. An information processing system according to claim 23, wherein said second information processing apparatus is a LAN server having an Internet connection function.

20 32. An information processing system according to claim 23, wherein said second information processing apparatus is a network connection device having an Internet connection function.

25 33. An information processing method comprising the steps of:

- (a) encrypting a life counter for content data;
- (b) adding said encrypted life counter to a

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content data file; and

(c) for externally transmitting, via a network, said content data file having said added life counter.

5 34. An information processing method comprising  
the steps of:

(a) externally receiving, via a network, a content data file to which an encrypted life counter has been added;

35. An information processing method comprising  
the steps of:

20 (a) externally transmitting, via a network, a content data file;

          (b) externally transmitting, via said network, a life counter for said content data file; and

          (c) externally transmitting, via said network, an application program file for processing said content data file.

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36. An information processing method comprising  
the steps of:

(a) receiving, via a network, a content data  
file;

5 (b) receiving, via said network, a life counter  
for said content data file;

(c) receiving, via said network, an application  
program file for processing said content data file;

(d) encrypting said life counter;

10 (e) adding said encrypted life counter to said  
content data file;

(f) transmitting, via said network, said  
application program file to a different information  
processing apparatus; and

15 (g) permitting the reading only of the content  
data file for an application program that is currently  
being executed by said different information processing  
apparatus.

20 37. An information processing method comprising  
the steps of:

(a) receiving, via a network, an application  
program file for processing content data from a  
different information processing apparatus;

25 (b) executing, via said network, said application  
program for processing content data stored in said  
different information processing apparatus;

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(c) subtracting, via said network, a specific value from a life counter for said content data stored in said different information processing apparatus each time said content data file is processed; and

5 (d) inhibiting said step (b) for processing content data when the value held by said encrypted life counter has been reduced to a value smaller than said specific value.

10 38. A computer-readable storage medium on which a program is stored that permits a computer to perform:

(a) a process for encrypting a life counter for content data;

15 (b) a process for adding said encrypted life counter to a content data file; and

(c) a process for externally transmitting, via a network, said content data file having said added life counter.

20 39. A computer-readable storage medium on which a program is stored that permits a computer to perform:

(a) a process for externally receiving, via a network, a content data file to which an encrypted life counter has been added;

25 (b) a process for processing said content data file;

(c) a process subtracting a specific value from

5 said encrypted life counter; and

(d) a process for inhibiting said step (b) for processing said content data file when the value held by said encrypted life counter has been reduced to a value smaller than said specific value.

10 40. A computer-readable storage medium on which a program is stored that permits a computer to perform:

(a) a process for externally transmitting, via a network, a content data file;

(b) a process for externally transmitting, via said network, a life counter for said content data file; and

(c) a process for externally transmitting, via said network, an application program file for processing said content data file.

15 41. A computer-readable storage medium on which a program is stored that permits a computer to perform:

20 (a) a process for receiving, via a network, a content data file;

(b) a process for receiving, via said network, a life counter for said content data file;

25 (c) a process for receiving, via said network, an application program file for processing said content data file;

(d) a process for encrypting said life counter;

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(e) adding said encrypted life counter to said content data file;

(f) a process for transmitting, via said network, said application program file to a different information processing apparatus; and

(g) a process for permitting the reading only of the content data file for an application program that is currently being executed by said different information processing apparatus.

10                   42. A computer-readable storage medium on which a  
program is stored that permits a computer to perform:

(a) a process for receiving, via a network, an application program file for processing content data from a different information processing apparatus;

(b) a process for executing, via said network, said application program for processing content data stored in said different information processing apparatus;

20 (c) a process for subtracting, via said network, a specific value from a life counter for said content data stored in said different information processing apparatus each time said content data file is processed; and

25 (d) a process for inhibiting said step (b) for  
processing content data when the value held by said  
encrypted life counter has been reduced to a value

smaller than said specific value.

43. An information processing apparatus comprising:

5        encryption means, for encrypting a life counter for content data; and  
          addition means, for adding said encrypted life counter to a content data file.

10        44. An information processing method comprising the steps of:

          encrypting a life counter for content data; and  
          adding said encrypted life counter to a content data file.

15        45. A storage medium which stored a program, said program comprising the steps of:

          encrypting a life counter for content data; and  
          adding said encrypted life counter to a content data file.

20        46. An information processing apparatus comprising:

          input means, for externally inputting a content data file to which an encrypted life counter has been added;

          processing means, for processing said content data

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file;

subtraction means, for subtracting a specific value from said encrypted life counter each time said content data file is processed; and

5 control means, for inhibiting said processing means from processing said content data file when the value held by said encrypted life counter has been reduced to a value smaller than said specific value.

10 47. An information processing method comprising the steps of:

externally inputting a content data file to which an encrypted life counter has been added;

processing said content data file;

15 subtracting a specific value from said encrypted life counter each time said content data file is processed; and

20 inhibiting said processing means from processing said content data file when the value held by said encrypted life counter has been reduced to a value smaller than said specific value.

48. A storage medium which stored a program, said program comprising the steps of:

25 externally inputting a content data file to which an encrypted life counter has been added;

processing said content data file;

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subtracting a specific value from said encrypted life counter each time said content data file is processed; and

5 inhibiting said processing means from processing said content data file when the value held by said encrypted life counter has been reduced to a value smaller than said specific value.

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